

**Abstract**

A Consolidated Online Assessment System (COLA System) that creates, manipulates, and distributes an objected-oriented paradigm that represents the scoring and related activities as a unified and integrated family of loosely coupled objects, most notably a "Case" representing a state-machine that replaces the constructed response from the test taker as the unit of work. The Scoring Model and associated Properties that encapsulate the business rules associated with what actions are appropriate or required for a unit of work and the Responses to the unit of work which represent the test-taker-contributed content (e.g., essays or other text-based responses, audio responses, digitized video responses, scanned images, diagrams, lessons plans, etc.) and ties that content to its creator are linked to a Distinct Scorable Unit (DSU) which represents a tree-based mechanism that connects and provides inheritability for the other primary system objects. The abstraction of the DSU allows the system to distinguish between the constructed response as test-taker contributed content and the constructed response as the carrier of state or status information as it passes through the assessment process.